pennsylvania
DEPARTMENT OF ENVIRONMENTAL PROTECTION

Southcentral Regional Office
CLEAN WATER PROGRAM

Application Type	**Renewal**	Application No.	**PA0087530**
Wastewater Type	**Sewage**	APS ID	**1648**
Facility Type	**SRSTP**	Authorization ID	**1434844**

NPDES PERMIT FACT SHEET
INDIVIDUAL SFTF/SRSTP

Applicant, Facility and Project Information

Applicant Name	**Paul McAnulty**	Facility Name	**McAnulty Res**
Applicant Address	3651 Waggoners Gap Road	Facility Address	3651 Waggoners Gap Road
	Carlisle, PA 17015-9540		Carlisle, PA 17015-9540
Applicant Contact	Paul McAnulty	Facility Contact	Paul McAnulty
Applicant Phone	(717) 249-4433	Facility Phone	(717) 249-4433
Client ID	93197	Site ID	461748
SIC Code	6514	Municipality	North Middleton Township
SIC Description	Fin, Ins & Real Est - Dwelling Operators, Except Apartments	County	Cumberland
Date Application Received	April 3, 2023	WQM Required	
Date Application Accepted	April 19, 2023	WQM App. No.	

Project Description: NPDES Permit Renewal.

Summary of Review

An application was submitted on March 31, 2023 for reissuance of an NPDES permit to discharge treated sewage from the single-family residence sewage treatment plant located in North Middleton Township, Cumberland County. The permit was last reissued on November 26, 2018 and became effective on December 1, 2018. The permit expires on November 30, 2023.

The facility has a design capacity of 400 gpd, and discharges to an UNT to Conodoguinet Creek, which is classified for Warm Water and Migratory fishes.

The WQM Part II No. 2197405 issued on August 28, 1997.

Changes from the previous permit: N/A

Based on the review outline in this fact sheet, it is recommended that the permit be drafted and published in the Pennsylvania Bulletin for public comments for 30 days.

Approve	Deny	Signatures	Date
X		*Hilaryle* Hilary H. Le / Environmental Engineering Specialist	November 9, 2023
X		*Maria D. Bebenek for Daniel W. Martin* Daniel W. Martin, P.E. / Environmental Engineer Manager	December 7, 2023

Discharge, Receiving Waters and Water Supply Information			
Outfall No.	001	Design Flow (MGD)	0.0004
Latitude	40º 16' 30"	Longitude	-77º 15' 49"
Quad Name	Landisburg	Quad Code	
Wastewater Description:	Sewage Effluent		
Receiving Waters	Unnamed Tributary of Conodoguinet Creek (WWF)	Stream Code	10300
NHD Com ID		RMI	0.389
Drainage Area	0.0436 mi.^{2}	Yield (cfs/mi^2)	NA
Q_{7-10} Flow (cfs)	See comments below	Q_{7-10} Basis	NA
Elevation (ft)	See comments below	Slope (ft/ft)	
Watershed No.	7-B	Chapter 93 Class.	WWF
Existing Use		Existing Use Qualifier	
Exceptions to Use		Exceptions to Criteria	
Assessment Status	Attaining Use(s)		
Cause(s) of Impairment			
Source(s) of Impairment			
TMDL Status	Final	Name	Conodoguinet Creek Watershed
Nearest Downstream Public Water Supply Intake	Carlisle Borough		
PWS Waters	Conodoguinet Creek	Flow at Intake (cfs)	
PWS RMI	35.95 miles	Distance from Outfall (mi)	Approximate 7.0 miles

Changes Since Last Permit Issuance: none

Drainage Area
The discharge is to the headwaters of Unnamed Tributary 10300 of Conodoguinet Creek at RMI 0.389. A point of first use survey conducted in 1997 indicated that the point of first use was at the point of discharge by finding an aquatic community of two types of stoneflies, two types of mayflies, two types of caddisflies, dragonfly, crane-fly, and crayfish. A drainage area upstream of the point of discharge is 0.0436 sq.mi. according to USGS StreamStats available at https://streamstats.usgs.gov/ss/.

Streamflow
USGS StreamStats does not produce a Q7-10 at the point of discharge given that this is the headwaters of a very small unnamed tributary.

Unnamed Tributary 10300 of Conodoguinet Creek
Under 25 Pa Code §93.9o, all unnamed tributaries of Conodoguinet Creek from PA 997 at Roxbury to Mouth are designated as warm water and migratory fishes. No special protection water(s) is therefore impacted by this discharge. No Class A Wild Trout fishery is impacted by this discharge. The discharge is located in a stream segment listed as attaining use(s).

Public Water Supply Intake
The fact sheet prepared for the last permit renewal indicated that the neared downstream public water supply intake is Carlisle Borough located on Conodoguinet Creek, approximately 7 miles from the discharge. Considering dilution, the discharge is not expected to impact the water supply.

Compliance History	
Summary of DMRs:	AMRs have been consistently submitted to DEP. The lab test results of discharge with application on March 7, 2023 were 14.3 mg/L of BOD_5, 51 No./100 mL of Fecal Coliform, and 6.75 mg/L of TSS.
Summary of Inspections:	7/02/2020: Mr. Benham, DEP Water Quality Specialist, conducted an administrative inspection. There were no violations noted during inspection. The laboratory test results samples on 6/16/2020 were within the permit limitations.
Other Comments:	There are no open violations associated with the permittee.

Other Comments:

Treatment Facility Summary

The treatment system serving 2-bedroom single residence (400 GPD) consists of a 1,000-gallon septic tank with zabel filter, a 400-gallon septic tank, distribution box, two (2) parallel wetland cells totaling 53.5 sq.ft, a “Lifeguard” filter, ultraviolet disinfection and outfall structure. The WQM permit no. 2197405 was issued on August 28, 1997.

Development of Effluent Limitations and Monitoring Requirements

Unless stated otherwise below, the proposed effluent limitations and monitoring requirements listed on page 4 of this fact sheet are derived from DEP’s Standard Operating Procedure (SOP) for New and Reissuance Small Flow Treatment Facility Individual NPDES Permit Applications (SOP No. BPNPSM-PMT-003). First, all existing monitoring frequencies and sample types have been changed to reflect the requirements specified in the SOP (i.e., all average monthly codes have been modified to annual average due to WMS coding issues). This is a reasonable approach as the permittee has been submitting annual maintenance reports consistently and no significant maintenance/operation issues are found. In addition, DEP no longer requires sampling of pH for single residence sewage treatment facilities. The facility was permitted and built prior to publication of DEP’s small flow treatment facilities manual. As a result, the facility may not be capable of meeting tertiary treatment limits (10 mg/L for both CBOD5 and TSS). As a result, existing effluent limits for CBOD5 and TSS will remain unchanged in the permit. Since only 1/year sampling will be conducted, a year-round 200/mL fecal coliform annual average effluent limit will be written in the permit rather than seasonal effluent limits.

Facilities that are designed based on a flow of less than 2,000 GPD or considered as SRSTPs are exempt from the Bay requirements. Accordingly, it is not necessary for the permittee to perform nutrient monitoring.

The proposed effluent limitations and monitoring requirements are derived from DEP’s Standard Operating Procedure (SOP) for New and Reissuance Small Flow Treatment Facility Individual NPDES Permit Applications (SOP No. BCW-PMT-003 revised on May 17, 2019, version 1.8). Based on the proposed requirements, the permittee will no longer be required to monitor for pH.

Carbon Biochemical Oxygen Demand ($CBOD_5$): Only the minimum treatment requirements of secondary treatment will be necessary to protect water quality. The limits of 25.0 mg/L average monthly and 50.0 mg/L instantaneous maximum will remain in the proposed permit.

Total Suspended Solids (TSS): The existing limits of 30.0 mg/L average monthly and 60.0 mg/L instantaneous maximum will remain in the proposed permit based on the minimum level of effluent quality attainable by secondary treatment based on 25 Pa. Code § 92a.47

For Flow, it is not necessary to perform daily maximum monitoring since the treated effluent is less than 2,000 GPD. The permit included a non-seasonal fecal coliform limit of 200 / 100 ml which is more stringent than the seasonal fecal limits (200 / 100 ml for summer; and 10,000 / 100 ml for winter). The reviewer notes that the frequency of sampling for Flow & Fecal Coliform are recommended to remain the same as the existing permit.

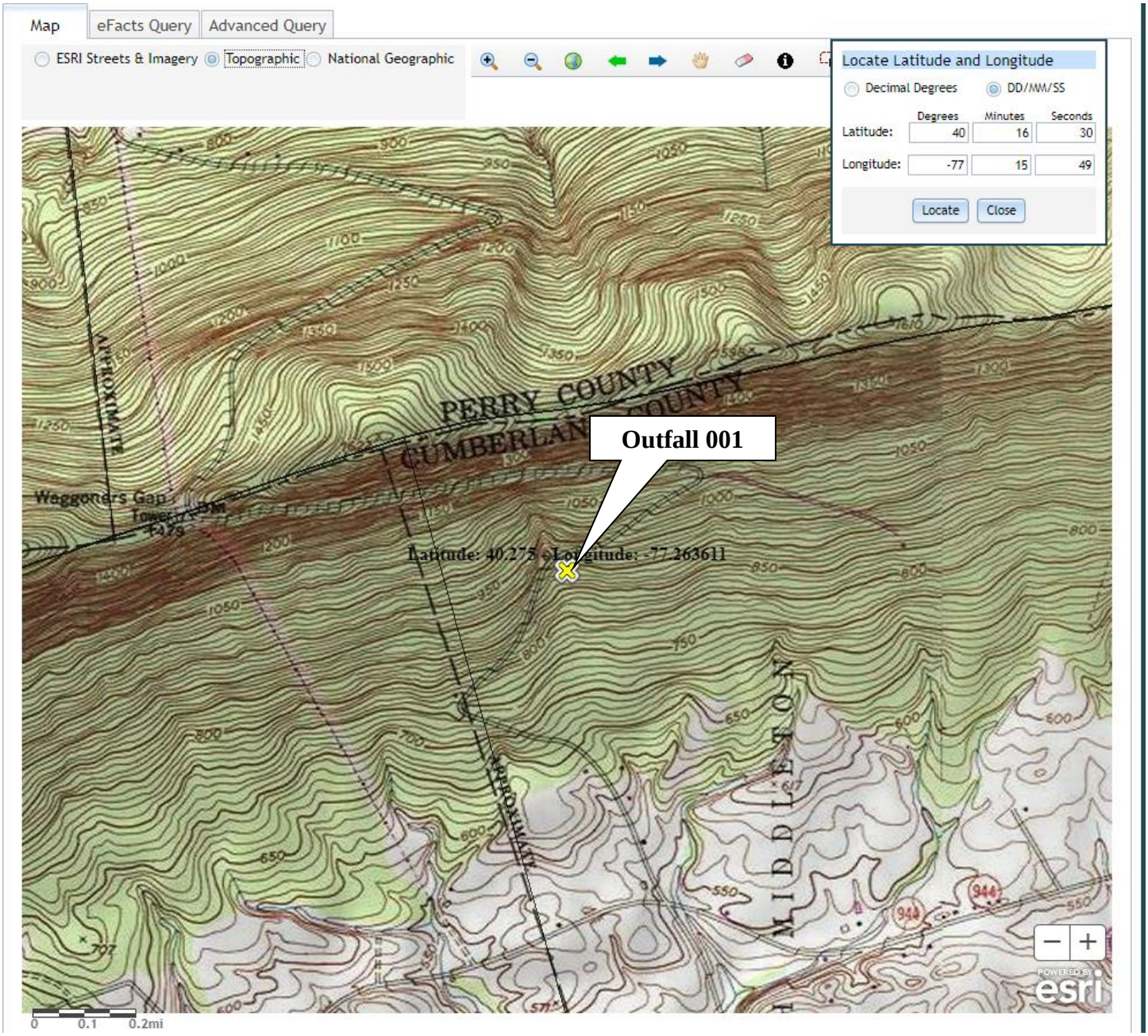
The facility utilizes UV disinfection.

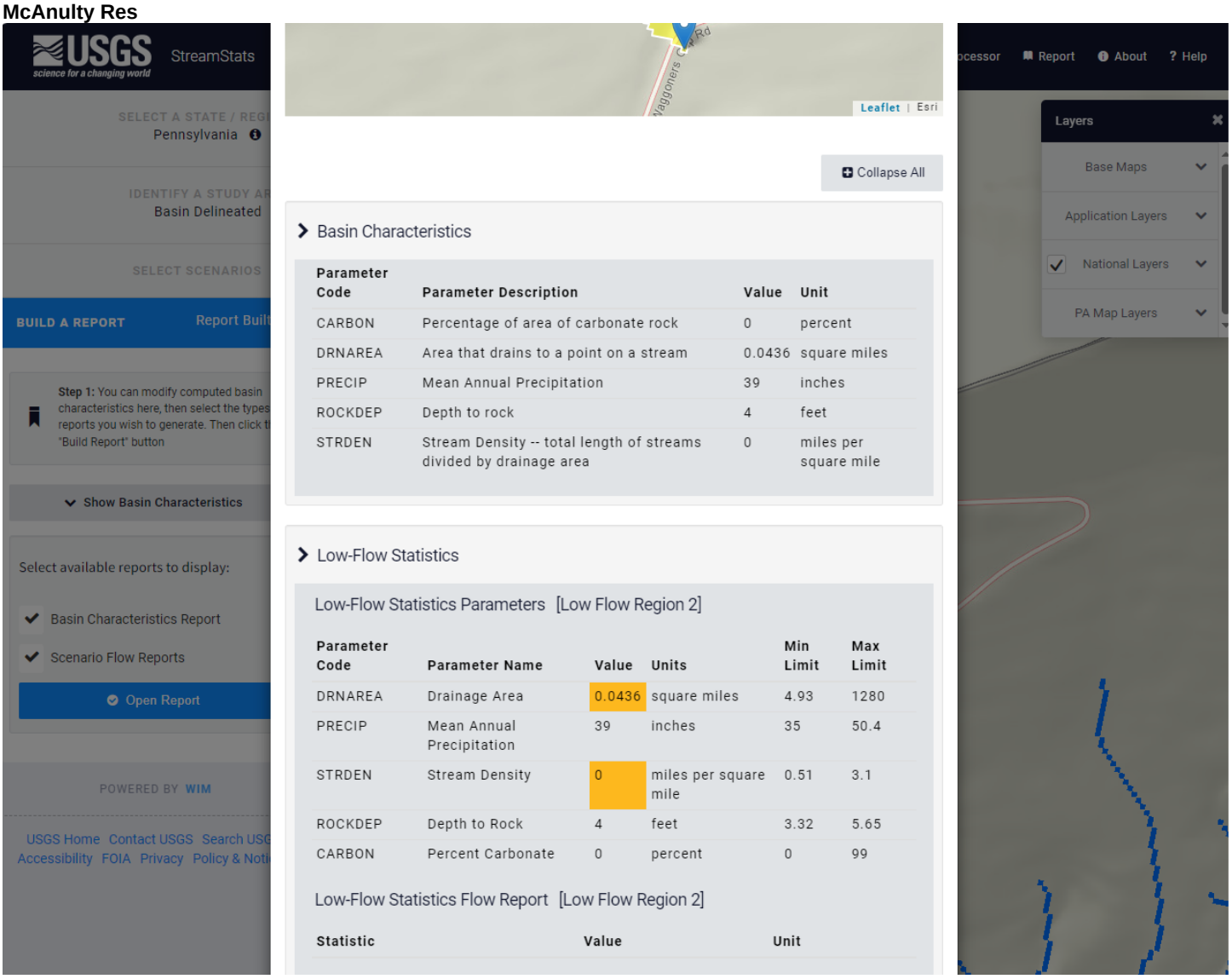
This facility is exempt from the Chesapeake Bay requirements for Total Nitrogen and Total Phosphorus because the flow is less than 2,000 gpd.

303d Listed Streams:
eMapPA indicates that the receiving stream is impaired for siltation due to agriculture. A "tentative" TMDL currently exists for this impairment.

Antidegradation (93.4):
The effluent limits for this discharge have been developed to ensure that existing in-stream water uses and the level of water quality necessary to protect the existing uses are maintained and protected. No High-Quality Waters are impacted by this discharge. No Exceptional Value Waters are impacted by this discharge.

Class A Wild Trout Fisheries:
No Class A Wild Trout Fisheries are impacted by this discharge.




USGS
science for a changing world
StreamStats
SELECT A STATE / REG
Pennsylvania
IDENTIFY A STUDY AR
Basin Delineated
SELECT SCENARIOS
BUILD A REPORT
Report Built
Step 1: You can modify computed basin characteristics here, then select the types reports you wish to generate. Then click t "Build Report" button
Show Basin Characteristics
Select available reports to display:
Basin Characteristics Report
Scenario Flow Reports
Open Report
POWERED BY WIM
USGS Home Contact USGS Search USG
Accessibility FOIA Privacy Policy & Noti
Leaflet | Esri
Collapse All
Basin Characteristics
Parameter Code | Parameter Description | Value | Unit
CARBON | Percentage of area of carbonate rock | 0 | percent
DRNAREA | Area that drains to a point on a stream | 0.0436 | square miles
PRECIP | Mean Annual Precipitation | 39 | inches
ROCKDEP | Depth to rock | 4 | feet
STRDEN | Stream Density -- total length of streams divided by drainage area | 0 | miles per square mile
Low-Flow Statistics
Low-Flow Statistics Parameters [Low Flow Region 2]
Parameter Code | Parameter Name | Value | Units | Min Limit | Max Limit
DRNAREA | Drainage Area | 0.0436 | square miles | 4.93 | 1280
PRECIP | Mean Annual Precipitation | 39 | inches | 35 | 50.4
STRDEN | Stream Density | 0 | miles per square mile | 0.51 | 3.1
ROCKDEP | Depth to Rock | 4 | feet | 3.32 | 5.65
CARBON | Percent Carbonate | 0 | percent | 0 | 99
Low-Flow Statistics Flow Report [Low Flow Region 2]
Statistic | Value | Unit
Report
About
Help
Layers
Base Maps
Application Layers
National Layers
PA Map Layers

Existing Effluent Limitations and Monitoring Requirements

Parameter	Effluent Limitations						Monitoring Requirements	
	Mass Units (lbs/day) (1)		Concentrations (mg/L)				Minimum (2) Measurement Frequency	Required Sample Type
	Average Monthly	Average Weekly	Minimum	Annual Average	Maximum	Instant. Maximum		
Flow (MGD)	Report Annl Avg	XXX	XXX	XXX	XXX	XXX	1/year	Estimate
CBOD5	XXX	XXX	XXX	25.0	XXX	50	1/year	Grab
TSS	XXX	XXX	XXX	30.0	XXX	60	1/year	Grab
Fecal Coliform (No./100 ml)	XXX	XXX	XXX	200	XXX	XXX	1/year	Grab

Proposed Effluent Limitations and Monitoring Requirements

The limitations and monitoring requirements specified below are proposed for the draft permit, and reflect the most stringent limitations amongst technology, water quality and BPJ. Instantaneous Maximum (IMAX) limits are determined using multipliers of 2 (conventional pollutants) or 2.5 (toxic pollutants). Sample frequencies and types are derived from the "NPDES Permit Writer's Manual" (362-0400-001), SOPs and/or BPJ.

Outfall 001, Effective Period: Permit Effective Date through Permit Expiration Date.

Parameter	Effluent Limitations						Monitoring Requirements	
	Mass Units (lbs/day) (1)		Concentrations (mg/L)				Minimum (2) Measurement Frequency	Required Sample Type
	Average Monthly	Average Weekly	Minimum	Annual Average	Maximum	Instant. Maximum		
Flow (MGD)	Report Annl Avg	XXX	XXX	XXX	XXX	XXX	1/year	Estimate
CBOD5	XXX	XXX	XXX	25.0	XXX	50.0	1/year	Grab
TSS	XXX	XXX	XXX	30.0	XXX	60.0	1/year	Grab
Fecal Coliform (No./100 ml)	XXX	XXX	XXX	200	XXX	XXX	1/year	Grab

Compliance Sampling Location:

Other Comments: